A Bicycle Skirt and Bloomer Combination.

A BICYCLE costume is all right when worn a-wheel by the fair bicyclienne, but very few women have advanced to the point where the bloomer, divided skirt, or the short skirt can be worn with complacency at any other time. Many women dislike to walk to and from the cycling school, bicycle stable, or club rendezvous in the garb that is essential to comfort and safety while enjoying their recreation on the wheel. Microbes or no microbes, it will be many a long day before the woman in short skirts and leggins will cease to attract attention when on the promenade.

True, many level-headed women seize every opportunity to appear in public in what they call rational attire, and predict the day when the long skirt will be as much out of date and place on Broadway as bloomers would be to-day. But that day has not yet arrived, and in consequence one of the difficult problems which the modistes of two continents have for a long time wrestled with is the production of a combination bicycle and promenade skirt, "suitable for all occasions," as the women say.

An eminent dictator of fashion in Munich seems to have made a decided advance upon several rather clumsy and ineffective devices of English and American origin.

For outing purposes, either bicycling or golf, this skirt is constructed in such a way that by an arrangement of hooks and eyes on the inside of the skirt the entire skirt is brought up to reach from 12 to 14 inches above the ground, according to the desire of the wearer. The change from skirt to bicycle dress, or back again, is accomplished in less than a half minute. In fact, the change back to the promenade length is accomplished in less time, as with the release of two hooks the skirt resumes its natural position of its own accord.

A Parisian cycling paper a year ago offered a prize for the invention of bicycle "knickers" that can readily be changed into full length, well-fitting trousers. A Bavarian knitting mill owner has just patented such a garment. The material is a tricot of pure wool, both warm and elastic. The shape of the trousers is in the fashion, and the material can only be discovered upon close inspection.

When it is desired to use them as bicycle trousers, the legs are pulled up, the hose and garters being fastened over the bottom of the trousers.

A Great Spiral Bicycle Track.

ONE of the most ingenious schemes yet devised to provide a satisfactory track in the city for bicyclists is in operation in Paris.

This track, to describe it in a few words, consists of a special gallery constructed around the sides of a large hall and rising by very small degrees.

By this system a track of great length is obtained in a comparatively small space. It is easy for a bicyclist to make the ascent over so smooth a floor. When he makes the descent there is, of course, no exertion at all.

The hall is very delightfully furnished, and the track is so divided that there is no danger of collisions between persons going in opposite directions. It would seem desirable from every point of view that a similar track should be constructed in New York.

The site of this track is the old panorama building of the Rue de Berri, which is familiar to many Americans. It has now been renamed the Palais-Sport.

The building has sixteen sides, and is 108 feet in diameter in one direction and 112 in another. It is a light construction of iron and brick, but has been strengthened. The central lantern in the roof is 80 feet above the floor.

The total length of the track, counting the ascent and the descent separately, is over 3,000 feet. It therefore gives the rider a chance to cover more than half a mile without going over the same ground twice. Any rider knows that this track would obviate many of the wearisome features of going round and round the same level floor.

The wall which bounds the track on one side is covered with a fine panorama, representing varied landscapes, fields, rivers, harvests and distant villages. This work is from the brushes of MM. Rube and Morison. It gives the building a very gay and attractive aspect. The trellis work enables the bicyclist to see the whole of it as he rides up and down.

There is an excellent cafe on the floor by which the track is entered, and a band plays good music. It is an ideal means of taking athletic exercise according to the ideas which now prevail in France.

Bicycle Canopies to Shield Modest Wheelwomen.

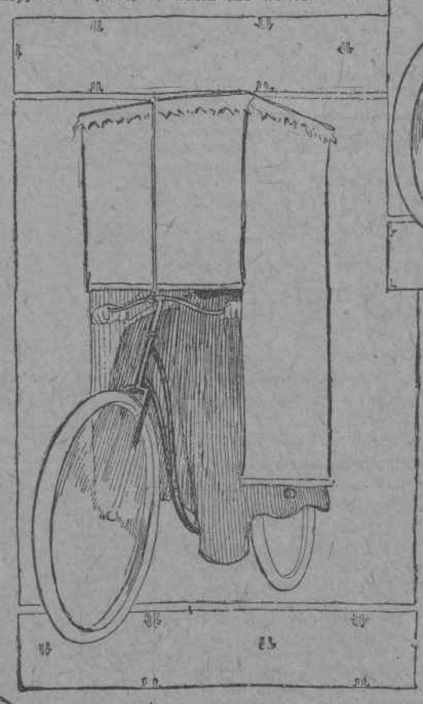
WITH a possible view to the introduction of the bicycle in Oriental lands, where it is forbidden of man that he shall gaze upon the faces of the pearls of the harem as they venture abroad for recreation, two Americans have taken out patents upon what may be termed bicycle canopies. They are an evolution from the umbrellas and sunshades for attachment to cycles, many of which have been invented, but few ever put into practical use.

The canopy of the new invention is made of silk or linen curtains, falling as low as the ankles at sides and rear, with a gauze veil draped from the front, of sufficient transparency to permit the cyclist to see the road.

Thomas Cherry, presumably a very modest young Virginian, and Miss Minnie Reid, of Pond Creek, Indian Territory, were the simultaneous originators of these devices to protect the blushes of the over-sensitive fair young bicyclienne.

Miss Reid had believed for a long time that young women and good women who have been young would be more ready to ride bicycles but for a natural modest timidity in appearing in public wearing bicycle garb. Revolving this fruitful thought in her mind, the idea came to her suddenly, as it did to Columbus when vexed by the question of making the egg stand on end. She would give to the world a boudoir, a cloister, on wheels.

Future generations of women, she believed, would call her blessed as they scorched over the roads, seeing everything, but themselves secure from the profane gaze of rude man. She at length patented nothing less than a canopy for bicycles, of which she writes in her specifications forwarded to the Patent Office: "It will protect the rider from the glare of the sun and the vulgar curiosity of the public. From the canopy are appended curtains of linen or some other opaque materials which extend to the heels of the rider, completely screening her from view, making the wheel as much a place of retirement as the interior of a family coupe."



Mr. Cherry's canopy for bicycles was conceived in the same spirit that actuated Miss Reid, but it is not so elaborate. It consists simply of an umbrella top, to the sides of which are affixed the seciuding curtains. When not in use they are gathered up and tied around the folded umbrella, which is then unshipped and strapped beneath the saddle

Snake-Bite Serum Now Made in Paris.

DR. CALMETTE, of the Pasteur Institute in Paris, who has for a long time been experimenting with snake poisons, is at last able to announce that he has discovered an absolute antidote. The doctor has tried the venom of snakes from all parts of the world, and his new anti-venomous serum renders all kinds harmless. A shipment of the serum will shortly be sent from Paris to the Pasteur Institute in Chicago. It will from there be distributed free to physicians all over the United States for use in case of snake bites. Similar shipments will be sent to England and to the French and English colonies where serpents abound.

The new serum is obtained in much the same way as anti-toxine for diphtheria. A horse or ass is injected with a small dose of snake poison, and the injection is gradually increased every few days until the animal can receive with impunity enough poison to kill four hundred horses.

In the case of snake bite the patient receives a hypodermic injection of the anti-venom in the skin over the stomach. The serum immunizes the blood and renders the venom harmless in the system. Dr. Calmette said that in every case the action of the serum would take place before the expiration of one and a half hours after the injection.

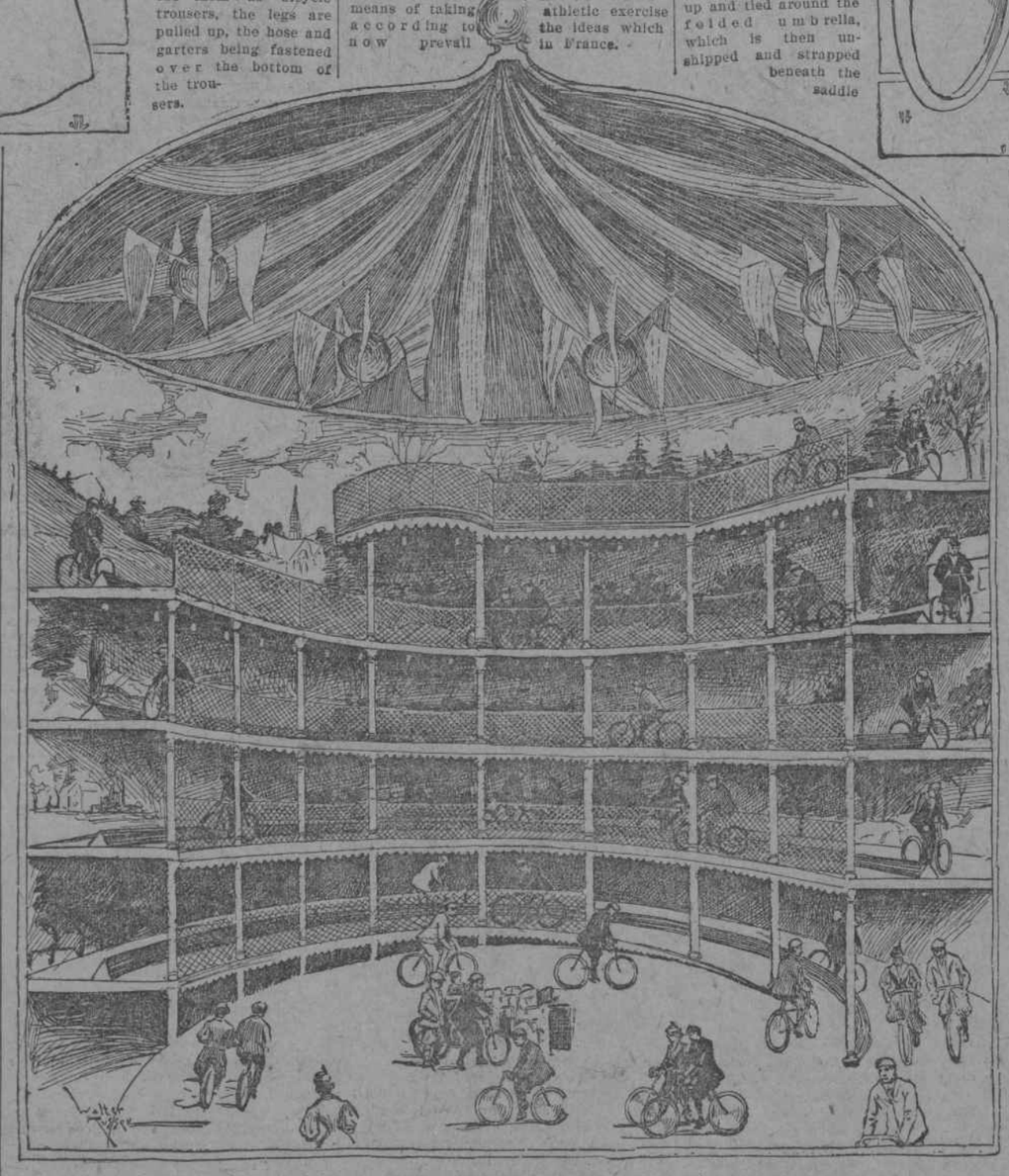
A snake bite is never, or very rarely, fatal sooner than in three hours after the bite. As a rule ten to twelve hours elapse before death, and sometimes even longer periods. A bite from a cofra di capello, which is the most venomous of all snakes, kills in from three to five hours. American rattlesnakes are not nearly so deadly, their poison rarely taking effect before from seven to ten hours.

The poison of all venomous snakes is very similar in its action. It acts by paralyzing the nerves of the animal bitten. This paralyzing action is resisted by the anti-venom, which neutralizes the poison before it leaves the blood and begins to take effect in the nerves going to the brain. Serum has been obtained from animals injected with poison from the tiger snake and the black snake of Australia, the deadly viper of France, the cobra di capello of India and the rattlesnake of America. Dr. Calmette had just received a copperhead from Dr. O'Reilly, of New York, when the Sunday Journal correspondent interviewed him. He showed the operation of extracting the poison from the serpent's fangs.

He seized the snake by the neck with a big pair of cloth-covered pincers and fixed it on the table so that it could not move its head. Taking a piece of hollowed out crystal he introduced it between the jaws of the snake. The snake bit several times savagely at the glass, the venom running down into the centre of the glass, as fast as it flowed from the fangs. When the glands of the serpent were empty the doctor replaced the snake in its cage. In a few days the serpent would have replenished its fangs with venom and be ready for another operation.

The poison was placed under a bell glass, which also contained a saucer of calcium of chloride. Calcium chloride rapidly absorbs moisture and the venom now changes from a fluid into a viscous, gummy mass, of the consistency of soft pitch. It afterward becomes hard, and in this state can be kept for years without losing any of its violence. The dried poison is then mixed with serum and injected into the animal to be immunized.

There are two kinds of anti-venom made which are of different strength. The weaker serum is sufficient to destroy the venom of a rattlesnake or copperhead, but not strong enough for the poison of a cobra. Consequently the stronger serum will be distributed in India, Africa and all the tropical countries, while the weaker kind will be used in Europe and America. A handkerchief or ligature is bound tightly just above the wound and the serum is injected over the stomach with an ordinary hypodermic syringe. Around the wound it is advisable to afterward inject a little chloride of lime to destroy any poison which may have been absorbed into the system.



How Parisians Take a Long Bicycle Ride Indoors.

Frozen Milk Sold by the Block.

MILK may be bought by the brick in Summer, just the same as some kinds of ice cream. It will be frozen solid, though, and if intended for use as soon as received in the household, the lacteal fluid for the tea or coffee will have to be chipped off with the handle of the knife or fork, according to the quantity desired in the drink. Perhaps at the Waldorf, at Delmonico's, and other resorts of the wealthy, the frozen milk may be served in cubes, like sugar, or in pats, like butter, and a man may order a lump of milk with his coffee and rolls, as well as a lump of sugar or "another pat of butter, please."

From a fad, frozen milk has grown to be more or less of a necessity in the warmer countries of Europe, and some of the larger dairymen in and about New York are seriously discussing the practicability of introducing the custom as an experiment during the coming hot months. It is claimed that if the milk should be first frozen, it is just as impervious to the gathering of disease germs as is boiled milk or water.

A recent bacteriological examination of the London milk supply brought out the uncomfortable fact that every sample examined contained specimens of a very unpleasant bacillus, indicating that in spite of all regulations, milk is still stored and distributed there under highly defective sanitary conditions, and a similar examination of the milk used in American cities would doubtless show the existence of pretty much the same conditions. Frozen milk is very different from that known as preserved milk, with which it has been lately confounded.

Preserved milk is simply condensed milk that is concentrated without the use of sugar, and in order to enable it to keep it is treated with antiseptics, principally boracic acid. There are other milk preservatives, though, known to dairymen under a number of fancy names, but almost all of them contain, if not boracic acid, either salicylic acid, or benzoin acid. Some authorities say the latter is a more powerful preservative than salicylic acid, which in Germany is considered the most powerful of food preservatives in common use.

Many persons do not take kindly to the idea of frozen milk, or even preserved milk. Fresh milk in cans, they claim, can be kept fresh for sixteen hours, and if it does not remain sweet for that length of time, they conclude that the milk was not fresh when poured into the cans, or that the cans were not clean.

A milk preservative, used in freezing milk in Germany especially, is known as "Formative," a 40 per cent aqueous solution of formic aldehydes. It is an exceedingly powerful hardening agent, in fact a strong poison, and its use has been frowned upon in many Continental countries. Salicylic acid is also used more or less in preserving frozen milk in some of the foreign countries, but its use is obnoxious inasmuch as those who take milk preserved by its use are innocently dosing themselves with a drug which will retard or arrest digestion, and even affect the heart. It is also claimed that it does not give security against all disease germs, though it will kill cholera bacilli.

The trade in foreign importations of frozen milk and cream is yet in its infancy, but advices recently received by American dairymen indicate that the industry will be speedily developed to greater proportions, especially in Holland. The Belgian Government designs to increase the trade at an annual outlay of $50,000, and in Copenhagen, the capital of Denmark, a company has been formed and arrangements have been completed for the regular export of frozen milk. The necessary plant has been erected, and contracts have been made already for the delivery of 110,000 pounds per week, which will be sent to all parts of the world in bricks or blocks like ice.

If the lines laid down in European countries were closely followed the health inspector would arrange these lists so that simultaneous occurrence of infectious diseases in a number of families served by the same ice-milk man would be promptly discovered, and the mischief checked.

The New Central Park Kangaroos.

A NEW feature has been added to the programme of the Central Park Menagerie by the kangaroos. Their family has long been famous for its amusing qualities. One of the great masters of American humor described the kangaroo as an "amoosin' cuss," and no one who studies the two specimens now in the menagerie will deny that the description is well merited.

Central Park Kangaroos,

What is it that makes the kangaroo so amusing? The answer must necessarily be a rather long and complete one. Let it at once be understood that the females are the more amusing sex. If we observe the animals in the Park, who are both of that sex, we shall soon understand why they have been the occasion of so much mirth.

The kangaroo has a very small head and shoulders, very small arms, very large stomach, very large hind legs, and a very large tail. Her ears, also, are very long.

She has a habit of standing upright on a tripod consisting of hind legs and tail. While in this position she is usually busy with some detail of her toilet. She combs herself all over, smooths out her tail and brushes her ears. At the same time she is generally occupied in chewing something.

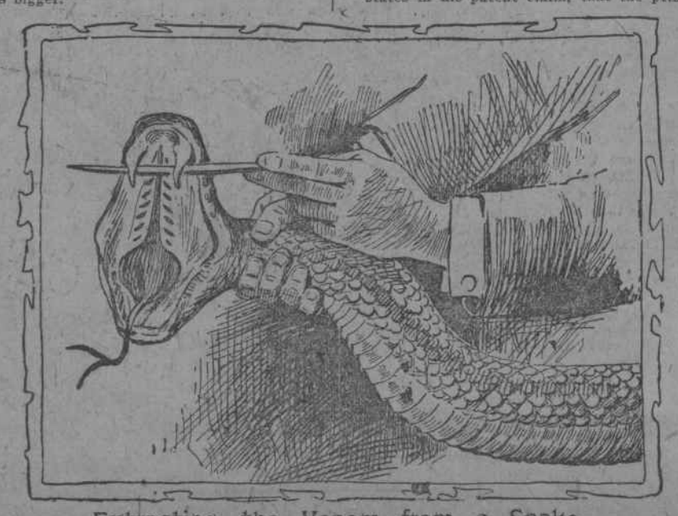
She can stand up higher than any animal of her size. She is enabled to do this with ease by reason of her powerful hind legs and tail. In this respect she has an advantage over man who stands on two feet while she rests on a tripod. She stands up when she is interested or alarmed. In justice to the male kangaroo it should be said that he stands even higher, because he is bigger.

After a considerable time spent in the attitude described, the kangaroo will, without any warning, take a tremendous leap. She is the greatest jumper among the mammals, the flea, who is an insect, being the only possible rival. She can cover fifteen feet at a bound. Her enormous tail is of great assistance to her in performing this feat. When the kangaroo goes bounding over the ground, she has the merriest possible air, suggesting a boy playing leap-frog.

The kangaroo is found only in Australia, and the neighboring islands. The female is remarkable for a pouch in front in which she carries her young. The little one remains in this until he is old enough to do some hopping and scratching for himself. The kangaroo has a small and prettily shaped head, and a beautiful eye, like that of the deer.

The male kangaroos are known to the Australians as "old men" or "boomers." As they grow old they become very fierce, and hunting them is an exciting sport.

In Australia, where dogs hunt the kangaroo, the dogs are sometimes drawn into the water, where the kangaroo tears his enemies to pieces with the claws on his enormous hind legs.



Extracting the Venom from a Snake.

The Movable Stove for Flats.

THE one thing needful to make life perfectly happy in a flat has been invented by Thomas Austin, of No. 567 Quincy street, Brooklyn. It is a stove on wheels.

The stove is connected with the wall of the apartment in which it is placed by a telescoping pipe. It can be moved to any part of the room at will and with very little trouble. It stands on wheels, and for those who wish to keep it within a strictly circumscribed area it can be fixed on rails running in two directions.

One end of the pipe is firmly fixed to the wall and the other to the stove. There is no danger of a disconnection and consequent asphyxiation. The pipe may be made with as many telescoping joints as are desired, and can be prolonged or turned in any direction.

Mr. Austin was led to make the invention by a pressing need which was felt in his own household. He has found it to work admirably, and has applied for a patent.

On very cold evenings the heater is drawn out into the middle of the room, so that everybody can sit around it. When the weather is milder it is pushed against the wall out of the way of the company. The heat is not greater in one position than in the other, but there is a considerable difference in the result.

The stove presents a very cheerful and glowing appearance and is declared to have the merits of an open fire.

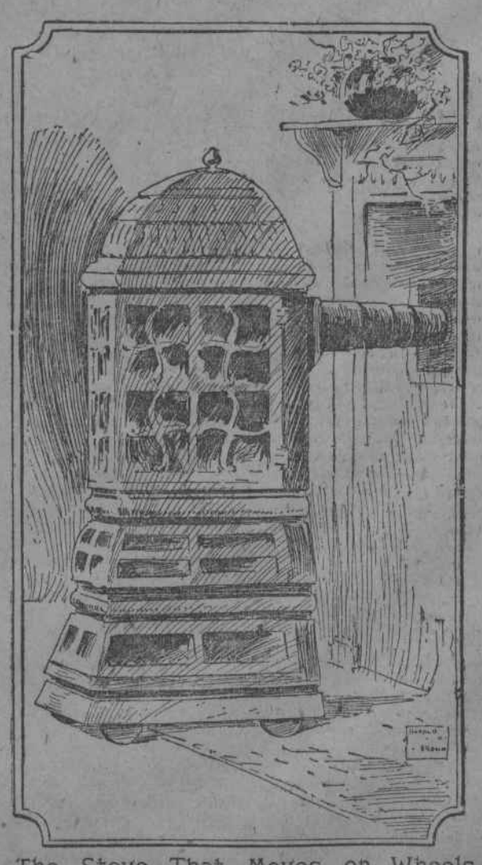
Mr. Austin has devised this stove especially for himself, but it is obvious, as he states in his patent claim, that the principles of a stove on rollers and of a telescoping flue can be applied to other stoves as well as to this.

The advantages of such an invention to those who live in flats are numerous. It is very desirable to have a heating apparatus of your own which you can put in or out of operation whenever you wish to. It is, moreover, an economy.

The ordinary immovable stove does not heat all parts of a flat, or even a room. The flat dweller is therefore obliged to have recourse to steam heat. That is what most people do who can afford it.

The average self-feeding stove, with its great cylinder filled with cold coal and its small radiating surface is a failure. To get enough heat from one of these one must have a very large stove, taking up more room than the average six or seven room flat has to spare. The great thing which stove men and builders have been trying to do for ever so many years is to get a heater that would warm the flat without consuming every inch of room in the little parlor.

It costs the man of modest means a great deal more in proportion to heat his little home than it costs the rich. With his movable stove Mr. Austin claims to have solved this great problem.



The Stove That Moves on Wheels.